

INTERNET/INTRANET USER INTERFACE TO A MULTIMEDIA MESSAGING SYSTEM

TECHNICAL FIELD

This invention relates to electronic messaging.

BACKGROUND OF THE INVENTION

Voice messaging systems have long provided the service of accepting and recording voice messages for subscribers from impromptu callers. In these systems, message origination is not restricted to subscribers of these messaging systems or to subscribers of remote messaging systems that are networked with these systems; rather, any caller can originate a message. As voice messaging and e-mail systems become integrated into multimedia messaging systems, it becomes desirable to extend the call-answer capability of voice messaging systems to text messages and other message-media besides voice, and to make this capability available to substantially any and all possible message originators, without pre-subscription and without preference or deference to the computer operating system of the originator.

One promising opportunity is to use platform-independent TCP/IP (transmission control protocol/Internet protocol) applications or platform-independent Web browsers and the growing community of TCP/IP and Web users to provide the connectivity infrastructure that is needed to deliver new types of electronic media directly into the mailboxes of a multimedia messaging system. The TCP/IP is the standard protocol suite of the Internet. Because of the Internet's popularity, TCP/IP applications have been written and are being distributed for essentially all major computer operating systems. Of specific interest are the FTP (file transfer protocol) protocol which allows the simple transfer of files between computers, Telnet which supports terminal emulation and login to host capabilities, and Chat which is a simple split-screen two-way text interface application that allows two people to type to each other simultaneously. Similarly, Web services on the Internet are being marketed and supported as a non-subscriber-based global information-distribution mechanism. Because of its popularity, Web browser applications have been written and are being distributed for essentially all major computer operating systems. These TCP/IP applications and Web browsers therefore provide a widespread infrastructure for text, binary, and other media message delivery.

Conventional Web integrations with mailboxes focus on retrieval of messages, where the mailbox is owned and the messages are retrieved by the message recipient who typically already has a mailbox user-interface application which has capabilities preferable to those provided by a Web browser. But such integrations do not benefit a message originator who has the ability to send full multimedia messages and who is not a subscriber to the messaging system. Some existing Web browser applications do include the ability to send e-mail. But this is done via the standard e-mail SMTP protocol which inherently has the disadvantages of requiring an affiliation with an SMTP server to fulfill the e-mail delivery request. Such an affiliation is not usually available without pre-subscription. The SMTP protocol also does not assure confirmed delivery into the recipient's mailbox.

SUMMARY OF THE INVENTION

Illustratively according to the invention, technical advance over the art is achieved by a method of and an

apparatus for interaction between a messaging system and a message originator, and delivery of the message originator's message to a mailbox of the messaging system, over an Internet and/or an intranet (referred to herein as Internet/intranet for short) by using TCP/IP communications applications such as HTTP, Telnet, FTP, or Chat as information-transfer and message-delivery mechanisms. This effectively creates an Internet/intranet-based text, binary, video, and/or multimedia file message-delivery analogue to the call-answer message-creation capability of telephony-based messaging systems. This arrangement improves multimedia message delivery into mailboxes for those who do not have access to gateways which deliver messages into the messaging system. It allows message contents to be delivered without regard for the application, the messaging infrastructure platform, or the operating system. Message delivery is advantageously immediate and confirmed, and the message cannot be delayed or lost in a gateway or a store-and-forward post office.

Generally according to the invention, messaging in a communications system that comprises a user terminal and a messaging system interconnected by an Internet/intranet is effected in the following manner. A request identifying a subscriber of the messaging system is sent from the user terminal via the Internet/intranet to the messaging system. In response to receipt of the request at the messaging system, subscriber information corresponding to the identified subscriber is sent from the messaging system via the Internet/intranet to the terminal. In response to receipt of the sent subscriber information at the terminal, the sent subscriber information is presented to a user of the terminal. In response to the user providing message information at the terminal, the message information is sent from the terminal via the Internet/intranet to the messaging system. In response to receipt of the sent information at the messaging system, the message information is composed (e.g., formatted) into a message of the messaging system, and the message is stored in the messaging system in a mailbox of the identified subscriber. Messaging effected in this manner gives the Internet/intranet user—any user, irrespective of whether they are or are not a subscriber of the messaging system—an interaction and message-delivery analogue to the call-answer message-creation scheme of telephony-based messaging systems. This is particularly true when the subscriber information sent to the terminal and played to the user includes the subscriber's presently-active personal greeting. Preferably, the sending of information via the Internet/intranet is effected by using at least one of the following protocols: HTTP, FTP, Telnet, and Chat. By using these standard and widely-available TCP/IP communications mechanisms, the effected messaging is made instantly and widely accessible without change to the existing Internet/intranet infrastructure.

Also preferably, in response to the storing of the message in the messaging system, an acknowledgment thereof is sent from the messaging system via the Internet/intranet to the terminal and presented there to the user. Message delivery is thus advantageously immediately confirmed to the message sender. Further preferably, the subscriber information sent to the terminal includes a form—a Web page, for example—for filling out by the user with the message information, and sending of the message information is performed in response to the user filling out the form with the message information. The user can therefore concentrate on composing the message content without having to worry about the format of the message and about whether or not he or she has remembered to select or specify any or all variable aspects of the message.